

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-2 (Cancelled)

3. (Currently Amended) A method of manufacturing a pivot assembly, comprising the steps of:

mating a first ball bearing to a lower end of a shaft to form a first structure;

mating an outer circumference of a second ball bearing to an upper end of a sleeve having an inner wall part to form a second structure;

mating the first structure to the second structure by mating the second ball bearing to an upper end of the shaft and mating the lower end of the sleeve to an outer circumference of the first ball bearing so that the inner wall part is disposed between the first and the second ball bearings, after the first structure and the second structure have been formed;

mating a second ball bearing to an upper end of the shaft;

mating an outer circumference of the second ball bearing to an upper end of a sleeve having an inner wall part;

mating an outer circumference of the second ball bearing to an upper end of a mating an outer circumference of the first ball bearing to a lower end of the sleeve so that the inner wall part of the sleeve is disposed between the first ball bearing and the second ball bearing;

mating a seal member to the upper end of the shaft to cover an outer end face of the second ball bearing;

imparting a pre-load pressure to the inner ring of the second ball bearing by applying pressure on the seal member; and

fixing the seal member to an outer circumference of the shaft.

4. (Currently Amended) The method according to claim 3, further comprising the steps of:

forming a sharp edge on an edge part of the seal member;

causing the sharp edge to stick closely at a point to one of the outer circumference of the shaft and the inner circumference of the sleeve; and

fixing the sharp edge at the point using a laser welding process while maintaining the pre-load.

5. (Previously Presented) The method according to claim 3, further comprising the step of:

forming the seal member by press blanking; and

fixing by a welding an edge part of the surface of the seal member that faces the press blanking to one of an outer circumference of the shaft and an inner circumference of the sleeve.

6. (Withdrawn) A method of manufacturing a pivot assembly, comprising the steps of:

mating a first ball bearing to a lower end of a shaft;

disposing a spacer between an outer ring of the first ball bearing and an upper end of the shaft;

mating a second ball bearing to an upper end of the shaft so that the spacer contacts the outer rings of the bearings;

mating a seal member to the upper end of the shaft to cover an outer end face of the second ball bearing;

imparting a pre-load pressure to the inner ring of the second ball bearing by applying pressure on the seal member; and

fixing the seal member to an outer circumference of the shaft.

7. (Withdrawn) The method according to claim 6, further comprising the steps of:

forming a sharp edge on an edge part of the seal member;
causing the sharp edge to stock closely at a point to one of the outer
circumference of the shaft and the inner circumference of the sleeve; and
fixing the sharp edge at the point.

8. (Withdrawn) The method according to claim 6, further comprising the
step of:

forming the seal member by press blanking; and
fixing by a welding an edge part of the surface of the seal member that faces the
press blanking to one of an outer circumference of the shaft and an inner circumference of the
sleeve.

9. (Withdrawn) An apparatus for preload application to a hard disk drive
pivot assembly including a shaft, a first ball bearing having a first inner ring and a first outer ring
and located on a first end of the shaft, a second ball bearing having a second inner ring and a
second outer ring and located on a second end of the shaft, a sleeve enclosing the first ball
bearing and the second ball bearing, and a seal member covering an outer end face of the first
ball bearing, said apparatus comprising:

a support means having a central hole that mates with the shaft to align the shaft
to the axis supporting the pivot assembly;

a pressing member having an axis and including a coaxial cylinder part and apply
the preload to at least one of the first inner ring and the first outer ring of the first ball bearing by
pressing on the seal member; and

a welding means laser welding the seal member to one of an outer surface of the
shaft and an inner surface of the sleeve while the pressing member applies the preload.

10. (Withdrawn) The apparatus for preload application in accordance with
Claim 9, wherein the pressing member further comprises a plurality of grooves formed parallel
to an axis of the pressing member, distributed circumferentially along a surface of the pressing

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member and extending to a surface of the seal member, and wherein the welding means conveys a laser beam through at least one of the plurality of grooves to the surface of the seal member.